



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

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JAN 27 2010

REPLY TO THE ATTENTION OF:

E-19J

Mr. Ralph J. Augustin
State Program Manager
US. Army Corps of Engineers
190 Fifth Street East, Suite 401
St. Paul, Minnesota 55101-1638

RE: Draft Environmental Impact Statement, U.S. Steel Keetac Taconite Mine
Expansion Project, near Keewatin in Itasca and St. Louis Counties, Minnesota
EIS # 20090419

I am providing comments on the Draft Environmental Impact Statement (EIS) for the U.S. Steel (USS) Keetac Taconite Mine Expansion Project, consistent with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The Keetac project is an expansion of the existing Keetac open pit mine, ore processing plant, and tailings basin near Keewatin in Itasca and St. Louis Counties in Minnesota. The proposed project would increase the taconite pellet production capacity by expanding the mine pit, adding stockpile areas, upgrading the concentrating and agglomerating processes, and restarting the Phase I line, which was previously idled. The indurating furnace equipment from the Phase I line would be refurbished and fueled by natural gas and biomass, with coal and fuel oil used as backup fuels. With these changes, Keetac's taconite pellet production output would increase by 3.6 million short tons per year (MSTY) to a total annual output of 9.6 MSTY.

The proposed action alternative would require new permits or amendments to the existing permits. The proposer estimates after considering maximum use of in-pit and existing stockpiles that 118 million bank cubic yards (Mbcy) of excess surface materials will need to be stockpiled over a 21.5 year period in order to have uninterrupted mining of taconite. The proposer plans to stockpile this excess material on available land adjacent to the mine pit area. The Draft EIS estimates that 560 acres of forest will be impacted and approximately 780 acres of wetlands will be impacted (direct and indirect), plus temporary impacts to wetlands. Additionally, the project will contribute to an increase in sulfate levels in nearby Swan Lake and increases in air emissions, including mercury emissions.

The United States Environmental Protection Agency - Region 5 (EPA) provided scoping comments to the U.S. Army Corps of Engineers (USACE) on the Keetac project

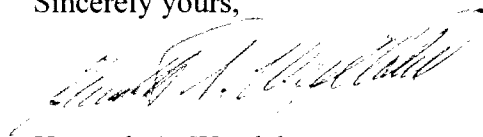
and has reviewed and commented on technical reports and the Preliminary Draft EIS for the project.

After our review of the Draft EIS, we have identified significant issues with the wetlands analysis. As you know, the Clean Water Act Section 404(b)(1) Guidelines require that the applicant demonstrate there are no practicable alternatives available that would have a less adverse impact on the aquatic environment for non-water dependent activities. The Guidelines presume that less damaging upland alternatives are available for these activities unless demonstrated otherwise by the applicant. The applicant must follow a sequence of steps to be in compliance with the 404(b)(1) Guidelines, which include avoidance, minimization, and compensation for unavoidable impacts. After review of the information available, EPA has determined the applicant has not demonstrated that impacts have been avoided and minimized to the maximum extent practicable and is not in compliance with the 404(b)(1) Guidelines at this time.

Based on the information provided in the Draft EIS, EPA has assigned a rating of Environmental Objections – Insufficient Information “EO-2.” Additional information needs to be provided to support the impact analysis documented in the DEIS. This rating will be published in the Federal Register. Our objections are based on the impacts to wetlands and the need for demonstrated measures to avoid and minimize those impacts, as well as concerns over the compensatory wetland plan. At this point, we question whether the project will meet Clean Water Act Section 404 requirements for selecting the least environmentally damaging practicable alternative (LEDPA). We also have identified issues in water quality, air emissions, and financial assurance. Discussion of these issues are enclosed.

Thank you for the opportunity to review and provide comments on the Draft EIS. If you have any questions or would like to discuss our concerns and recommendations, please contact me at (312) 886-2910 or Sherry Kamke of my staff at either kamke.sherry@epa.gov or (312) 353-5794.

Sincerely yours,



Kenneth A. Westlake
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosures

**EPA Region 5 Comments for the
Draft Environmental Impact Statement (EIS) for the U.S. Steel Keetac Taconite
Mine Expansion Project**

Wetland Avoidance, Minimization and Compensatory Mitigation

After our review of the Draft EIS, we have identified significant issues with the wetlands analysis. As you know, the Clean Water Act Section 404(b)(1) Guidelines require that the applicant demonstrate there are no practicable alternatives available that would have a less adverse impact on the aquatic environment for non-water dependent activities. The Guidelines presume that less damaging upland alternatives are available for these activities unless demonstrated otherwise by the applicant. The applicant must follow a sequence of steps to be in compliance with the 404(b)(1) Guidelines; which include avoidance, minimization, and compensation for unavoidable impacts. After review of the information available, EPA has determined the applicant: 1) has not demonstrated that impacts have been avoided and minimized to the maximum extent practicable, and 2) is not in compliance with the 404(b)(1) Guidelines at this time. Our detailed comments follow.

Avoidance and Minimization

The Draft EIS states that the project's purpose and need is to increase the rate and total quantity of taconite pellet production at the Keetac facility using existing infrastructure. The proposed project would increase the taconite pellet production capacity by expanding the mine pit, adding stockpile areas, upgrading the concentrating and agglomerating processes, and restarting the Phase I line, which was previously idled. We agree with the proposer that alternative sites or modified designs for the plant, pit, tailings thickener, and tailings basin do not have advantages over the proposed project because those portions of the proposed project take advantage of existing infrastructure.

The proposed impacts to wetlands in the project area are significant (780 acres) and the need to avoid and minimize these impacts is critical. We agree with the statement on page EX-9 that positioning of stockpiles is crucial to minimizing impacts to wetland and potentially other natural resources. According to the Draft EIS, approximately 454 acres of wetlands of varying quality will be directly impacted from the two stockpiles. According to the Draft EIS, 9% of the proposed wetland impacts are high quality, 77% are moderate quality, and 14% are low quality. The location and design of the stockpiles provide the best opportunity to demonstrate avoidance and minimization of wetland impacts, especially impacts to higher quality wetlands.

There is information in the Draft EIS addressing the need to use the proposed stockpiles, such as the following statement: "The Project Proposer has indicated that the footprint of the proposed east and south stockpiles is required to meet the out-of-pit stockpiling needs after maximizing in-pit stockpiling." However, there isn't a sufficient amount of information included to substantiate the statement. Throughout the Draft EIS, similar statements about stockpiling are made without adequate support. While the project

cannot completely avoid impacting wetlands, the Draft EIS isn't clear how wetland impacts have been avoided or minimized. Even though there is some information in the Draft EIS, including Appendix E, which addresses stockpile alternatives, the level of information included is insufficient to support a least environmentally damaging practicable alternative (LEDPA) decision under Section 404 of the Clean Water Act. From a process perspective, it is not clear if the Draft EIS will, by itself, serve as the basis for a permit decision by the USACE or if additional information will be evaluated prior to a permit decision.

As written, the Draft EIS does not demonstrate that all necessary avoidance and minimization steps have occurred. Since avoidance and minimization of wetland impacts are critical to achieving compliance with Clean Water Act Section 404(b)(1) Guidelines, we recommend that the relevant sections of the Final EIS be expanded. We understand the additional analysis on avoidance and minimization of wetland impacts, in particular, in-pit stockpiling, will be evaluated as part of the Permit-to-Mine process. We believe that the stockpile avoidance information is critical and needed in the EIS process in order for the NEPA documentation to be used to support a LEDPA determination by the USACE for wetlands dredge and fill under Section 404. We recommend the comments on minimizing impacts to wetlands due to stockpiling be addressed in the Final EIS.

Sections of the EIS, including 3.2.2.1 and Appendix E, which deal with stockpiling, should be expanded to include the following information:

- The available and required stockpiling capacity and how it was calculated.
- Existing capacity and location of in-pit stockpiling.
- Capacity and location of existing out-of-pit stockpile and an explanation of how the applicant optimized the use of existing stockpiles.
- Waste rock recycling and reuse initiatives used or proposed by the applicant. For example, will coarse waste rock be used to construct/reinforce the tailings basin dam?

We believe that the information included in Appendix E is targeted at the question of where it makes most sense to site new out-of-pit stockpiles. The analysis provides a start, but does not completely answer the question. As indicated in the bullets above, we do not think it is clear how much out-of-pit stockpile capacity is needed. Additionally, we have the following concerns:

- More information is needed to explain the relationship between mineral property rights and phasing of the project and the effect both have on stockpile alternatives.
- We believe there may be potential stockpile areas outside of those areas evaluated in Appendix E that would have fewer impacts on wetlands. Stockpile options adjacent to existing mining activities and still inside the proposed permit-to-mine area were not evaluated.
- The process used to avoid and minimize impacts to wetlands was not communicated in the Draft EIS. This is important to demonstrate for all wetlands. Additionally, steps taken to avoid and minimize impact to higher quality wetland systems were not described. It does not appear that any steps were taken to avoid

high quality wetlands, such as 9.23 acres of hardwood swamp in the proposed south stockpile area or high quality wetlands in the proposed east stockpile area (such as Wetlands #2008_13 and 2008_33).

- Some of the wetlands are geographically isolated. It appears to us that measures could be taken to avoid or minimize impacts to those wetlands. We question if the impacts to the south stockpile could be avoided completely by finding additional upland stockpile capacity in the area of Stockpile Concept D and other areas.
- Stockpile Concept D appears to have potential and should be explored in more detail. This stockpile option would result in approximately 159 fewer acres of wetland impacts. However, it isn't clear how much of the land in Concept D is owned or otherwise in the control of the Project Proposer versus how much of the Concept D area would need to be acquired by USS.
- There is not enough information presented in the Draft EIS that allows us to evaluate the quality of the wetlands in the Concept B and D locations. The acres of stockpile capacity that would be available, the number of wetland acres in those parcels, and the quality of the resources are important considerations.

EPA is willing to work with USACE and the project proponents to address Clean Water Act Section 404(b)(1) Guideline compliance. Under the Guidelines, the applicant is required to demonstrate that the project has avoided and minimized wetland impacts to the maximum extent possible. Providing answers to the questions listed above and considering other ways to tell a comprehensive story about wetland avoidance and minimization will be helpful. There are multiple ways to do this, but one of the clearest ways is through the use of maps, tables and narratives. In other projects, we have seen project applicants show graphically or through tables and narratives how their planning efforts have aligned with the necessary sequencing steps. In the case of the Keetac project, it would be useful to consider the use of tables and narratives for this purpose. For example, a table that showed the total number of acres of wetland within the permit-to-mine area, wetland acres proposed to be impacted within the permit-to-mine area, percentage of wetland avoided in the permit-to-mine area could be useful.

Compensatory Mitigation

Although a good portion of the proposed mitigation is on-site, EPA is not certain whether or not the compensatory wetlands associated with the tailings basin wetland site will be jurisdictional. Typically, we would expect that impacts to jurisdictional wetlands would be mitigated with jurisdictional wetlands. We acknowledge that this strong preference is not always possible. Ultimately, it is critical that compensatory wetlands be protected over the long term using appropriate legal mechanisms, such as conservation easements, and that they are sustainable systems. We have reviewed the performance standards for the compensatory tailings basin wetlands, and we are satisfied that the standards are appropriate. However, we have concerns about the long-term management of the tailings basin wetlands system. Since those wetlands are partially relying on the mining process to provide hydrology, it is important to establish what would happen to the needed wetland hydrology if the mining operation is reduced or stopped completely. To help evaluate this concern, we recommend that the Final EIS include a water budget for the

tailings basin compensatory wetlands. We would expect this water budget to evaluate baseline conditions, conditions during mining operations, and post-mining conditions.

Additionally, we are concerned with the ability of the tailings basin wetlands to provide the necessary functions and values needed to replace those wetlands that will be impacted. We anticipate that getting the appropriate functions and values established on a nutrient poor tailings basin will be a difficult task. In order to receive appropriate credit for these wetlands, we recommend that functional assessments be done on these mitigation areas. Specifically, we recommend that the applicant use the Minnesota Rapid Assessment Model (MNRAM) to assess the functional status of the mitigation wetlands during monitoring. The USACE regulations allow for credit of up to 100% for creation if the mitigation is low risk and adequate hydrologic data exists, but for high-risk areas, the USACE allows up to 50% credit. WCA allows for credit of up to 75% for creation and 50-75% for buffers. The proposed mitigation ratio of 1:1 is too low. Creation is EPA's least preferred mitigation method. There is a greater risk of failure and greater challenges involved. We understand that mitigation will be occurring concurrently with impacts, but there are risks associated with establishing wetlands in a tailings basin. Additionally, there will still be a temporal loss of function because of the amount of time it will take wetlands to develop in a low-nutrient medium. It may take quite a number of years to achieve the functional value of existing wetlands. Because of these issues, EPA recommends a mitigation ratio of 2:1.

Financial assurances for wetland mitigation must be addressed before issuance of the Section 404 permit and should be based on size and complexity of the project, the cost of planning, acquiring and constructing mitigation sites, monitoring, etc. USS must discuss the details of the dollar amount, type of financial assurance (for example, performance bond or letter of credit) and release conditions with USACE. USACE cannot evaluate whether the financial assurances are sufficient to cover potential mitigation inadequacies without this type of information.

Throughout the document, the Draft EIS references two different types of compensatory mitigation for wetlands, restoration and creation. When characterizing the mitigation wetlands, the terms are used inconsistently. To avoid confusion and to improve accuracy, we recommend that the Final EIS describe exactly what is being proposed for compensatory mitigation. Creation and restoration are two different approaches. From our conversations with USACE, we understand that the proposed mitigation wetlands in the tailings basin are to be created. The applicant should describe in detail in the Final EIS how/why the mitigation proposed constitutes the creation of wetlands.

Wetland Characterization

When characterizing wetlands, the terms "artificial" and "degraded" should not be used interchangeably. If a wetland is artificial, it doesn't necessarily mean it's degraded. If a system is artificial and degraded, it should be identified as such. Conversely, a wetland may be degraded but not artificial, or artificial but not degraded. The Final EIS should clarify these terms and use them consistently.

The Draft EIS did not include a map or figure that shows where proposed direct, indirect, and temporary impacts to wetlands would take place based on the proposed project footprint. From the information in the Draft EIS, we could not determine if the wetlands in the area northwest, north and east of the proposed East Stockpile area that will be temporarily impacted are already counted in the discussion of direct and indirect impacts. We recommend that the Final EIS address this by adding a figure and providing additional information in the text.

Additionally, we recommend that the indirect wetland impact study be improved by including a sensitivity analysis of the unknown parameters used in the water balance model. This would be helpful in evaluating and confirming the estimated extent of indirect wetland impacts.

Water Quality

Need for Background Monitoring

Section 4.1.1.2 of the Draft EIS states that there is limited data for Hay Creek and West Swan River on water quality and the physical condition of those streams. Section 4.1.4.1 of the Draft EIS states that it is not known what potential impacts the additional flow into Hay Creek will have on existing high quality biotic communities. That section goes on to discuss possible monitoring and mitigation and options. We believe that this is a significant data gap. EPA recommends that the proposer either assess what the potential impact may be, or if that cannot be done, provide an explanation as to why modeling of that impact is not possible. At a minimum, we recommend that the Final EIS and Record of Decision for this project commit to biological monitoring, along with water chemistry and physical assessments, for Hay Creek and the West Swan River prior to the initiation of mining activities in order to establish baseline conditions. That data would enable a comparison of these parameters before mining operations begin and during mining operations.

The mine pits closest to Keewatin (Mesabi Chief, Aromac, Perry, and Saregent) will experience pumping rates 59-118% greater than the No Action pumping rates. We recommend that the pumping data be evaluated along with draw down of the Keewatin municipal wells to proactively evaluate potential future impacts to the Keewatin wells under mining conditions. Additionally, the Final EIS should provide information about the presence of private wells in the area.

The Draft EIS did not include any information about the potential for seepage from the tailings basin, either from the bottom of the basin or through the walls. This is an important issue with potential impacts to surface water/groundwater and overall water quality in the tailings basin footprint. We recommend the Final EIS address this potential.

Lack of Water Quality Data

Generally, there is not enough water quality information provided in the Draft EIS to allow for any detailed review of water quality as a whole. Likewise, EPA did not have access to technical reports pertaining to water quality topics that might provide this information, most specifically, the "Water Quantity and Quality Report" or the "Water Quality Sampling Plan (Liesch, 2008)". There are multiple references in the Draft EIS where the statement is made that water quality won't be an issue, but there is no support in the Draft EIS for that statement. Typically, for a project of this size, we expect to see detailed water quality data or a summary of water quality values versus standards. This type of data was not included in the Draft EIS. This is particularly important, since Swan Lake and other waterbodies that will be directly impacted by the project have the highest aquatic life designation and human health protection since they are designated for domestic consumption.

It appears that a determination was made that sulfate and mercury (see below) were the only contaminants of concern and thus concentration information was included for only these two parameters. It is important for the Final EIS to provide information about relevant water quality parameters, so that the reader can determine independently that no other contaminants are of concern. We recommend that the Final EIS provide a summary with enough detail to support any conclusions that are reached, including applicable Minnesota water quality standards that would be appropriate for the waterbodies in the project area.

The project area already has waterbodies that are impacted with levels of mercury. This project will increase the levels of mercury in all those impacted waterbodies as well as the levels of mercury in fish tissue. Tables 4.7.19 and 5.5.2 show ambient fish mercury concentrations from all nearby lakes and the amount that these levels will increase due to the proposed project. It is not clear what form of mercury is being used here, but the existing levels are exceeding the current Minnesota methylmercury concentration to protect human health (fish consumption) of 0.2 ppm (the MPCA Total Maximum Daily Load (TMDL) goal for mercury concentrations in fish). The Final EIS should discuss how mercury impacts on aquatic life and human health will be covered under the National Pollutant Discharge Elimination System (NPDES) permits and a TMDL(s) since these waters are already impaired for mercury.

Sulfate and Protection of Wild Rice

Section 5.4 includes a good discussion of wild rice located in the project area water bodies. The Draft EIS leaves no doubt that wild rice stands are present in Swan Lake, Swan River, Hay Creek and Hay Lake, and that these water bodies have documented harvesters, despite the MDNR conclusion that the yields range from poor to moderate. As a result of the information provided in the Draft EIS, we understand that the MN sulfate standard of 10 mg/L for the protection of wild rice is applicable. The Draft EIS appears to indicate uncertainty as to whether the 10 mg/L standard is applicable by providing a discussion of other acceptable sulfate ranges of 50 mg/L to 282 mg/L for wild rice growth. The discussion at section 5.4.2 on page 5-46 under "Regulatory

Framework” also leaves some doubt as to what standard is applicable by stating, “The current state rule establishes pollutant standards to be used as a guide for determining the suitability of waters for such uses, including the production of wild rice.” EPA recognizes the uncertainty in sulfate impacts on wild rice, and supports the gathering of more monitoring and research. However, the current applicable Minnesota water quality standard for sulfate in these waterbodies is 10 mg/L. The Final EIS would be strengthened by including a more detailed discussion addressing the following concerns:

- An affirmative statement that the 10 mg/L sulfate criterion is applicable for the four water bodies;
- A discussion of the past monitoring data and exceedance of the 10 mg/L sulfate standard;
- A discussion of state antidegradation rules and whether an expanded discharge of this pollutant could occur in the NPDES permit, given that the standard is already exceeded; and
- How several of the mitigation options discussed on page 5-50, at Section 5.4.6, will be used to meet the standard (e.g. sulfate removal technologies, alternate discharge locations, etc.), rather than reserving these options only for mitigation if adverse changes are detected in wild rice stands during the proposed project.

Air Emissions

The Keetac facility is an existing major source of air emissions under the Prevention of Significant Deterioration (PSD) regulations. EPA is aware that the Minnesota Pollution Control Agency (MPCA) and the project applicant are discussing air emissions and air permitting requirements. EPA will continue to discuss air permitting factors with MPCA, which has authority for direct implementation of the Clean Air Act in Minnesota.

Mercury

Based on a review of the information included in the Draft EIS, it isn't clear what type and configuration of mercury emissions control will be installed and implemented at Keetac. Throughout the Draft EIS, the mercury emissions control is described differently. For example, on page 3-24, the Draft EIS includes a statement, "the Project Proposer has chosen to install activated carbon injection (ACI) to control mercury emissions for the new line." However, on page 4-125 and 4-126 there is a statement "...the proposed pollution control system consists of a circulating fluidized bed (CFB) scrubber for control of sulfur dioxide, followed by a dry electrostatic precipitator (ESP) for control of particulate emissions. The ESP would also provide some mercury control for mercury associated with particulate" with no mention of the ACI technology. Later on page 4-126, a statement is made that ACI "is viewed by the MPCA and the Project Proposer as having the highest potential for controlling mercury emissions from the proposed furnace. Because ACI technology has not been demonstrated on taconite facilities and the efficiency is yet undetermined, impact analyses have been conducted by

evaluating just the spray dryer adsorber (SDA)-ESP system and assuming that this proposed air pollution control system would provide 30 percent mercury control."

The statements made in Chapter 3 of the Draft EIS seem to indicate that ACI will be used, but statements made in Chapter 4 do not. Assuming that ACI will be utilized, it would be useful to describe the whole control configuration (the order of CFR, ACI, and ESP technologies) and which components contribute what level of control/removal, because it isn't ACI alone that achieves mercury control. We recommend that the Final EIS be explicit and consistent about what mercury emission controls will be used.

Section 5.5 provides a good analysis of cumulative impact analysis for mercury. In most places in the United States, mercury deposition does not come primarily from a few local sources, but rather from a mix of many sources, national and international, natural and anthropogenic. Therefore, while the impacts modeled in Table 5.5.2 may seem relatively small, they actually constitute a large impact from just a couple of facilities. The Minnesota Mercury TMDL sets a goal of reducing mercury emissions from statewide taconite production from 735 pounds in 2005 to 210 pounds in 2025, so clearly Minnesota plans to get significant emissions reductions even in the absence of the Proposed Project, and the Project would not seem to result in emissions below this baseline. EPA notes that the projected emissions reductions are less than would be required under the Minnesota TMDL. On page 5-57, the Draft EIS states, "By adding 218 pounds per year of mercury emission from the proposed future projects, Minnesota's emissions would increase by about 6.5 percent at the time that Minnesota's TMDL implementation plan contain an ultimate statewide mercury emission goal of 789 pounds in 2025." Therefore, we recommend that the Final EIS describe how mercury emissions are expected to decrease, in spite of the project, rather than to state that emissions will be lower as a result of the project.

The lakes in the project area exceed the MPCA water quality threshold for mercury in fish tissue. Since the lakes exceed the water quality threshold, they are characterized as "impaired" and are included in Minnesota's TMDL Pollutant Reduction Plan. Section 4.7.7.3 describes the requirements of Minnesota's statewide TMDL Pollutant Reduction Plan, including the requirement that increased mercury emissions from an expanding source be offset by emissions reductions, either within the source or elsewhere. Section 4.7.7.3.1 provides a project proposal under the new and expanding source guidelines of the mercury reduction strategy. However, the information presented is confusing. One statement discusses how the Project Proposer, "is willing to develop an agreement with the MPCA to install mercury controls on existing lines at Minntac and Keetac to the extent necessary to offset the increase in mercury emissions from the proposed project" but another statement is made "...total mercury emissions from the Project Proposer at Minntac and Keetac, including the Proposed Project, can be maintained at the same or lower total emissions than would otherwise occur without the Proposed Project." We believe that specific plans may be difficult to convey since at this point it is still undecided what mercury controls will be used and what reductions can be expected. The Final EIS should specify what mercury controls will be used and clarify what the baseline is (what year is being used to compare emission levels). Additionally, the Final EIS

should include a conceptual mercury reduction plan for the Keetac project and show how that plan is consistent with the Minnesota TMDL.

Greenhouse Gas Emissions (GHG)

We appreciate that the Draft EIS includes projected annual emissions for CO₂ and discusses the general effects of greenhouse gas (GHG) emissions and global climate change. The analysis provided in the Draft EIS includes a carbon footprint of the proposed project with and without proposed GHGs reductions. The analysis looked at fuel mix alternatives and included a discussion of producing iron pellets in another country with weaker emissions control requirements. This information is useful to the general public in understanding the project.

The carbon footprint of the Proposed Project was calculated assuming a proposed fuel mix of 50 percent biomass – 50 percent natural gas. The two alternatives evaluated for the Proposed Project carbon footprint include: 1) GHG emissions without GHG reductions, and 2) GHG emissions with GHG reductions. The results of these two alternatives, in short tons per year (TPY) of carbon dioxide equivalents (CO₂e), are summarized in Table 3.5.2.

The estimated total greenhouse gas emissions from the Proposed Project are 758,500 tons per year (688,099.6 metric tons). This includes land use changes but not biogenic emissions. By way of comparison, the Statewide greenhouse gas emissions in Minnesota were approximately 152 million tons CO₂e in 2006.

While the greenhouse gas emissions of any single project may be small when compared to global emissions, any additional greenhouse gases emitted contributes to the global concentrations of gases. EPA agrees with this statement. The Draft EIS includes an analysis of several options to minimize the GHG contributions it makes.

The CO₂ emissions are an important consideration for this project. Both EPA and the State of Minnesota have initiated efforts to address GHGs since this EIS was begun. On December 7, 2009, the EPA Administrator signed the Endangerment and Cause or Contribute Findings under Section 202(a) of the Clean Air Act, 74 FR 66496 (Dec. 15, 2009), in which she found that the six key well-mixed greenhouse gases threaten public health and welfare. All projects that emit GHGs would potentially impact Minnesota's ability to reach the statewide GHG emission goals as established by the Minnesota Legislature in 2007. These goals include a 15% statewide GHG emission reduction from 2005 levels by 2015, a 30% reduction by 2025, and an 80% reduction by 2050.

In Section 3.5.2, the Draft EIS discusses how the proposed project has avoided potential GHG emissions relative to standard projects through various means including fuel mixes, furnace improvements, heat recycling, motor efficiency, and logistical changes. We support these efforts because of their potential to reduce overall facility GHG emissions. EPA is in favor of proactive measures to address GHG emissions, including the development GHG reduction plans. Because the regulatory environment for GHGs is uncertain and dynamic at this time, the applicant should consult with EPA and the State

of Minnesota during and after the air permitting process. We encourage the proposer to develop and implement plans to mitigate GHG emissions associated with this project and include that information in the Final EIS and Record of Decision for the project.

Financial Assurance

Financial assurance is not discussed in the Draft EIS. Long-term post-closure care may be necessary to protect water quality, and a financial instrument will be needed to ensure adequate funds are available as long as necessary for this purpose. The need for, and cost of, reclamation and closure activities and post-closure controls and/or treatment should be addressed in the Final EIS. EPA is currently engaged in a rule-making process for financial assurance for the hardrock mining industry. Because the amount and viability of financial assurance are critical factors in determining the effectiveness of these instruments, EPA believes it is necessary to analyze and disclose these factors in the Final EIS to determine the significance of the impacts and inform a decision about whether the project is cost-effective. EPA believes this information is essential for an adequate analysis of the proposed project because it could make the difference between a project sufficiently managed over the long-term by the site operator that will protect the environment versus an unfunded/under-funded contaminated site that becomes a liability for the Federal government, e.g., under the Comprehensive Environmental Response, Compensation, and Liability Act. We recommend that the proposer include financial assurance information, including that required by the State of Minnesota, in the Final EIS.